Description of Common Bicycle Facilities

Different types of facilities will be needed to provide safe and comfortable accommodation for bicycles in the District of Columbia bicycle network. This is a short list of common types of bike facilities. Specific design guidelines for these and other bike facilities are provided in the *District of Columbia Bicycle Facility Design Guidelines* document.

Shared Roadways

Shared roadways are streets and roads where bicyclists can be served by sharing the travel lanes with motor vehicles. Usually, these are streets with low traffic volumes and/or low speeds, which do not need special bicycle accommodations in order to be bicycle-friendly. Shared roadways can also include streets with wide outside lanes (13 to 14 feet). Increasing the outside lane width increases comfort for bicyclists.

Signed-Shared Roadways

A signed-shared roadway is roadway which has been designated by signing as a preferred route for bicycle use. Bike route signs can be posted on key routes to indicate to bicyclists that particular advantages exist to using these routes compared with alternative routes. This type of facility may also include pavement symbols to help direct bicyclists.

Bike Lanes

A bike lane is a portion of the roadway that has been designated by striping, signing and pavement markings for the preferential or exclusive use of bicyclists. Bike lanes are always located on both sides of the road (except one way streets), and carry bicyclists in the same direction as adjacent motor vehicle traffic. The minimum width for a bicycle lane is 5 feet.

Shared-Use Pathways/Multi-Use Trails

Shared-use pathways (multi-use trails) provide a high quality walking and bicycling experience in an environment that provides separation from traffic. Shared-use paths should be a minimum of ten-feet wide and paved. Their width may be reduced to eight feet if there are physical or right-of-way constraints. These types of paths can be constructed within a roadway corridor right-of-way, in their own corridor (such as a greenway trail or rail-trail), or be a combination of both. In some cases, there is a need for shared-use paths *in addition to* bike lanes on busy streets. Wide sidewalk facilities can also be designated as shared-use paths, with or without marked bicycle space. Shared-use paths should not be used to preclude on-road bicycling but rather to supplement a system of on-road bicycle facilities for less experienced cyclists.

Description of Common Bicycle Facilities, continued

Bike-friendly traffic calming

Slowing motor vehicle speeds helps improve the Bicycle Level of Service of a road. Traffic circles and landscape medians are examples of facilities that can be added to a roadway to slow motor vehicles. Bike lanes and shoulders can also calm traffic when outside edge-lines are used to narrow the motor vehicle lanes.

Exclusive bus and bicycle lanes

Multi-lane streets that serve as bus routes have the potential to accommodate exclusive bus and bicycle lanes. On many bus routes with frequent bus stops, regular automobiles back up behind buses in the outside lane, significantly reducing the utility of the outside lane for non-transit use. Exclusive lanes ensure that regular vehicles do not get stuck behind buses, allow buses to avoid traffic congestion, and also provide a wide lane for bicyclists. These lanes should be used on streets with frequent bus service and with potential to serve large numbers of bicyclists. Exclusive bus and bicycle lanes were used in the District in the 1980s on Connecticut Avenue.

Bike boxes at intersections

Bike boxes are installed to allow bicyclists to move in front of cars waiting at an intersection to increase their visibility and reduce conflicts with turning vehicles. They are typically used at intersections with left-turning cyclists and/or right turning vehicles. It employs an advanced stop bar at a signalized intersection, creating a 10-foot to 15-foot long area between the crosswalk and the stop bar. During a red signal phase, bicyclists are able to better position themselves for a left turn by moving left across the bike box. This device is profiled in the Institute of Transportation Engineers *Innovative Bicycle Treatments* report, and has been tested in several cities around the country.